GOBLEO, EKBEPPE

REMARKS

The above preliminary amendment is made to remove multiple dependencies from claims 3 and 6.

A new abstract page is supplied to conform to that appearing on the publication page of the WIPO application, but the new Abstract is typed on a separate page as required by U.S. practice.

Applicants respectfully request that the preliminary amendment described herein be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, John J. Gresens (Reg. No. 33,112), at 612.371.5265.

Respectfully submitted,

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JJG/kas



- 1. [Method for vacuum diecasting for the manufacture of high-quality castings from metals or their alloys, whereby, by means of a device for creating underpressure and a shutoff valve (16) a mould cavity (5) and a casting chamber (6, 6') and a casting channel of a diecasting mould (1) are evacuated in a controlled manner, whereby the mould cavity (5) to be filled is not cleared for use until it has been vented, and the casting chamber (6, 6') is closed up until this moment and is pre-filled to 100% with metal melts, characterized in that the casting chamber (6') is vented through a face-side aperture to the mould cavity (5), while the metal melts are already being moved by the casting piston (7) in the direction of this aperture.] A process for vacuum die casting for the production of high-quality cast parts made of metals and/or their alloys, with a mold cavity (5) and a casting chamber (6, 6'), as well as an injection channel of a die casting mold (1), being evacuated in a controlled way by means of a device for generation of partial vacuum and an isolation valve (16), characterized in that mold cavity (5) to be filled is first released when it has been degassed, and the casting chamber (6, 6') is closed until this time and is 100% prefilled with metal melt.
- 2. [Method] A process according to Claim 1, [characterised] characterized in that the mould cavity (5) is evacuated [during the filling of the casting chamber (6, 6')] while the casting chamber 6, 6' is being filled.
- 3. [Method] A process according to [claim 1 or 2] <u>claim 1</u>, [characterised] <u>characterized</u> in that an [aperture] <u>opening</u> of the casting chamber (6, 6') is closed by a valve (11) [and a separate venting process of the casting chamber (6') and the mould cavity (5) is carried out by means of a flow reduction channel (10) in the valve (11)].
- 4. [Diecasting mould, in particular a vacuum diecasting mould (1), for the manufacture of castings made of metals or their alloys, with a device (16) for the evacuation of the mould cavity (5) and the casting chamber (6, 6'), whereby a face-side aperture of the casting chamber (6'), located opposite of the casting piston (7), can be closed by a valve (11), in particular for carrying out the method according the claim 1, characterized in that the valve (11) features a flow reduction channel (10)] A process according to claim 2, characterized in that an opening of the casting chamber (6, 6') is closed by a valve (11).
- 5. [Diecasting mould according the claim 4, characterised in that the valve (11) is hydraulically controlled and is provided with a seal (14)]. A die casting mold, particularly a vacuum die casting mold (1) for the production of cast parts from metals and/or their alloys, having a device (16) for evacuation of the mold cavity (5) and the casting chamber (6, 6'), particularly for performing the process according to claim 1, characterized in that an opening on the face of the casting chamber (6, 6') which lies opposite to the casting pluger (7), can be closed by a valve (11).
- 6. A Diecasting [mould] mold according to [claim 4 or 5] claim 5, [characterised] characterized in that the valve (11) is [connected by means of a piston rod (12) to a hydraulics system (13), with temperature separation] hydraulically controlled and provided with a seal (14).